

CLAIMS

WHAT IS CLAIMED IS:

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A1  
1. A system for caching data from an origin server,  
comprising:

a user profile database that stores at least one user  
profile containing output preference data with respect to  
5 at least one of output content and output layout;

an object database for storing selected data from the  
origin server; and

a dynamic information composer coupled to the object  
database and the user profile database, wherein the dynamic  
10 information composer composes user-specific information as  
an output based on data in the object database and the user  
profile.

2. The system of claim 1, further comprising a user  
profile generator coupled with the user profile database to  
generate a new user profile.

3. The system of claim 1, wherein the dynamic  
information composer composes the user-specific information  
in WML.

4. The system of claim 3, wherein the dynamic information composer composes the user-specific information in real time.

5. The system of claim 1, further comprising a change trigger coupled to the user profile database, the object database, and the dynamic information composer, wherein the change trigger monitors changes in the object database and triggers output delivery when a number of information changes in the object database reaches a predetermined threshold.

6. The system of claim 1, further comprising an image converter coupled to the object database for converting an image format of the selected data from the origin server, wherein the object database caches the selected data in the object database after image format conversion.

7. The system of claim 6, further comprising a document converter coupled to the object database for extracting data segments of the selected data from the origin server based on the output preference data, wherein

5 the dynamic information composer composes the user-specific information based on the data segments.

8. The system of claim 7, wherein the document converter converts an HTML file into an XML file and stores the XML file in the object database, and wherein the dynamic information composer composes the user-specific  
5 information based on an XML-based content tag in the XML file.

9. The system of claim 1, further comprising a document converter coupled to the object database for extracting data segments of the selected data from the origin server based on the output preference data.

10. The system of claim 9, wherein the document converter converts an HTML file into an XML file and stores the XML file in the object database, and wherein the dynamic information composer composes the user-specific  
5 information based on an XML-based content tag in the XML file.

11. A method for caching data from an origin server,  
comprising the steps of:

obtaining a user profile and an information request,  
wherein the user profile contains output preference data  
5 with respect to at least one of output content and output  
layout;

storing selected data from the origin server in an  
object database;

fetching requested information from the object  
10 database if the object database contains the requested  
information;

fetching and caching information from the origin  
server into the object database as the selected data if the  
object database does not contain the requested information;  
15 and

composing user-specific information based on the  
requested information from the fetching steps and the user  
profile information.

12. The method of claim 11, further comprising the  
step of delivering the user-specific information to a  
wireless device after the composing step.

13. The method of claim 12, further comprising the steps of:

monitoring a number of information changes in the object database; and

5 triggering the delivery step once the number of information changes in the object database reach a predetermined threshold.


14. The method of claim 11, further comprising the step of converting an image format of the selected data from the origin server, wherein the caching step occurs after the image format converting step.

15. The method of claim 14, further comprising the step of converting a document format of the selected data from the origin server, wherein the caching step occurs after the document format converting step.

16. The method of claim 15, wherein the document formatting step includes the steps of extracting at least one data segment of the selected data based on the output preference data such that the composing step composes the

5 user-specific information from said at least one data  
segment.

17. The method of claim 16, wherein the document  
formatting step includes the steps of:

 converting an HTML file from the origin server to an  
XML file having an XML-based content tag;

5 storing the XML file in the object database,

and wherein the composing step composes the user-  
specific information based on the XML-content tag in the  
XML file.